CLAIMS:

1. A material for treating a wound comprising a keratin protein fraction in which the protein fraction is intact.

2. A material for treating a wound comprising a keratin protein fraction in which the protein fraction is from the intermediate filament protein family.

3. A material for treating a wound comprising a keratin protein fraction in which the protein fraction is from the high sulphur protein family.

4. A material for treating a wound comprising a keratin protein fraction in which the protein fraction is s-sulfonated.

5. A material for treating a wound comprising a keratin protein fraction according to any one of claims 2-4 in which the protein fraction is hydrolysed.

6. A material for treating a wound according to any one of claims 1, 2, 3 or 5 in which the protein is s-sulfonated.

7. A material for treating a wound according to any one of claims 1, 4 or 5 in which the protein is from the high sulphur protein family.

8. A material for treating a wound according to any one of claims 1 or 4-5 in which the protein is an intermediate filament protein.

9. A material according to any preceding claim wherein the material is selected from the group consisting of: a fibre, a film, a foam, and a hydrogel.

10. A method for making a wound care product comprising
(a) preparing a 10% solution of a keratin protein;

(b) mixing the keratin protein and a water soluble polymer to form an intimate mixture;

(c) casting the aqueous mixture so produced; and

(d) freezing and thawing in sequence to produce a hydrogel.

11. A method according to claim 10 in which the physico-mechanical properties of the biomaterials are improved by introducing cross-linker agents to form disulfide bonds and thus remove sulfonate functionalities.

12. A method according to claim 11 in which the cross-linking agent used as a reductant is a thiol or thioglycollate salt.

13. The method according to claim 11 or claim 12 in which the physico-mechanical properties are wet and dry strength.

14. A method according to claim 12 in which the thioglycollate salt is ammonium thioglycollate solution.

15. The method according to any one of claims 10-14 wherein the keratin protein is s-sulfonated.

16. The method according to any one of claims 10-15 wherein the keratin protein is a protein fraction.

17. A method according to claim 16 in which the protein fraction is intact.

18. The method according to claim 16 or 17 wherein the keratin protein is from the intermediate filament protein family.

19. A method according to any one of claims 10-18 wherein the water soluble polymer is selected from the group consisting of polyvinyl alcohol, polyvinylpyrolidone, polyethylene glycol and the like.

20. A method of improving the wet strength properties of the wound care products produced by the method of any one of claims 10-19 by incorporating a cross-linking agent into them.

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21. A method according to claim 20 in which the cross-linking agent is an aldehyde.

22. A method according to claim 21 in which the cross-linking agent is selected from the group consisting of formaldehyde, glyoxal, glutaraldehyde and the like.

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